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ABSTRACT

Principals and teachers involved in implementing benchmark testing in a large, urban, midwestern school district progressed from lower to higher stages of concern during the 4 years of a longitudinal study. A random sample of the teachers and all the principals in the district's 49 elementary, 9 junior high, and 10 high schools completed the Stages of Concern Questionnaire before benchmark testing (evaluating the attainment of academic objectives by students at particular grade levels) was introduced in the district. The same group also completed questionnaires 2 years later and at the end of the fourth year of the program. The questionnaires identified which of seven levels of concern related to innovations were most intense for each respondent, from low-level concerns for the self through middle-level, task-related concerns to high-level concerns about an innovation's impact. Among the study's findings were that elementary teachers' concerns were of higher levels than those of secondary teachers, that knowledge about the innovation raised the level of concern, and that English and mathematics teachers' concerns were of higher levels than those of others. This report concludes with a discussion of the findings' implications and some factors possibly affecting the findings. (PGD)

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Teacher and Principal Stages of Concern Regarding Implementation of Benchmark Testing - A Longitudinal Study

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TEACHER AND PRINCIPAL STAGES OF CONCERN REGARDING IMPLEMENTATION OF BENCHMARK TESTING - A LONGITUDINAL STUDY

Introduction

Efforts to institutionalize change in schools in the United States have met with varying amounts of success. Current research has helped to clarify factors which have contributed to our failures in bringing about desired changes. This paper presents a summary of the findings of the three phases of a four year study of stages of concern of teachers and principals in a large mid-western school district during the time that benchmark testing is being implemented in their schools.

During the 1981-1982 school year the staff had been informed that benchmark testing would begin the next year. This form of testing refers to specifying objectives for students at particular grade levels and evaluating their attainment. The implementation of benchmark testing programs, often associated with discontinuing the practice of social promotion of students, represents steps by school districts to be more accountable in their quest to improve standards in education. The concerns of teachers and principals about benchmark testing in the school district being studied were examined in 1981-1982 (Phase I), in 1983-1984 (Phase II), and again in 1984-1985 (Phase III).

The initial levels of concern of both teachers and principals were measured, again determined two years later, with a final check on stages of concern at the end of the fourth year. Comparisons were made between teachers and between teachers and principals by grade level as to their initial concerns, changes in their concerns two years and three years

later, and the relationship between their concerns and grade level taught or administered, their age and gender, subject areas taught (secondary schools only), and their knowledge of, and participation in benchmark testing.

In this paper relevant literature is first reviewed. The study design, instruments used in conducting the study, the analysis of the data, the results, and discussion of the results conclude this paper.

Review of Related Literature

This literature review helped to bring into sharper focus research regarding developmental stages and personal characteristics of teachers and principals, and time as factors in implementing educational change. Following is a brief review of literature relating to these variables and their relationship to implementing educational change.

Some investigators have suggested that the centrality of the teacher in implementing an adopted program has been ignored. Schiffer (1978), for example, suggested that while these change attempts have tended to center on curriculum materials and program, we have since learned that teachers were the critical factor if change was to take place. The commitment of teachers to an innovation was found to be very important for project implementation by the Rand Change Agent Study (Berman and Pauly, 1975). McLaughlin and Marsh (1978) reported that a key reason for failure of many of the "Great Society" reform efforts was serious underestimation of teacher training needs. In focusing on characteristics of unsuccessfully implemented innovations, McKay and Nelson (1980) indicated that such programs are likely to fail without teacher training and support. Difficulties with implementing new programs have led to arguments for

viewing teachers as more active agents in the innovation process (Olson, 1980; Elliott, 1975; MacDonald & Walker, 1976).

That portion of the Rand Study which addressed factors affecting the initiation and implementation of innovations in local school districts (Berman & McLaughlin, 1978) also highlighted the crucial role of the principal. Principal involvement in curricular implementation is critical to the success of an implementation effort (Loucks & Pratt, 1979). Nicholson and Tracy (1982) found that principals' knowledge of the educational change and clarity of role were significantly related to teacher attitude while teacher participation in the change process had major effect on their attitude and upon implementation.

Research also suggests that developmental stages of growth in feelings and skills experienced by individuals as they adopt innovations are other critical variables related to implementation of innovations (Fuller, 1969; Fuller, 1970; Hall, George, & Rutherford, 1976; Hall, 1979a). There is reason to believe that unless lower stage concerns are resolved, higher stage concerns are not likely to emerge (Hall, George, & Rutherford, 1979).

Several writers also indicate that the element of time is critical to implementing educational innovations. Change must be thought of as long term with three years considered to be a minimum period of time for bringing about innovations (Dupuis & Askov, 1982; Hall, 1979b; James, 1981; Heckman, et al., 1983).

Relevance of Existing Research

Existing research such as that mentioned above is relevant to this study and a discussion of the results. The research reviewed suggests that (1) change is a process that occurs over time; (2) change is made by

individuals (e.g. teachers and principals) and unless individuals change it is unlikely that schools can initiate, maintain, or institutionalize change; (3) to understand and facilitate change there is need to be aware of, and to attend to the personal needs, feelings, and perceptions of individuals in the change process; and, (4) there are developmental levels and stages that individuals progress through as they become increasingly competent in dealing with benchmark testing. Stages of conern about an innovation appear to progress from seemingly unrelated concerns, to self, to task, and finally to impact concerns. There is also reason to believe that unless lower stage concerns are resolved, higher stage concerns about task and impact (e.g., What are my responsibilities? How will this affect my students?) are not likely to emerge.

Questions to be Answered

The questions for which answers were sought in this study include:

1. Do individual teachers and principals register varying intensities of concern about benchmark testing?
2. What demographic characteristics of teachers and principals relate to their stage of concern?
   - grade level taught/administered?
   - subject area taught (secondary teachers only)?
   - type of position (teacher, principal)?
   - gender of study participant?
   - age of respondent?
   - their knowledge of benchmark testing?
   - their involvement with benchmark testing?

3. Is there a relationship between the amount and type of in-service education provided teachers and principals and their perceptions about their own knowledge of benchmark testing?

4. Is there a relationship between the teachers and principals self-perceptions of knowledge about benchmark testing and the amount of experience they have had with this testing program?

5. What factors relate to change in stage of concern of teachers and principals?

- amount of experience?
- role (teacher, principal)?
- grade level taught/administered?

Method

Panel analysis was used to measure concerns of teachers and principals about benchmark testing. A general information questionnaire and an instrument for measuring levels of concern about this innovation were administered at the time of their initial involvement with it. Two years and again three years later these same subjects were surveyed, using the same instrument plus a set of questions to measure how informed the respondents were about the innovation and their degree of involvement with it.

Instruments

The instrument used to measure the teacher's and principal's levels of concern is the standardized instrument, The Stages of Concern Questionnaire (SoC Questionnaire). The instrument measures seven stages of concern with

Stage 0 indicating little concern about or little involvement with an innovation. Stage 6 concerns relate to an individual's desire to explore more universal benefits from the innovation, including the possibility of major changes or replacement with an alternative. The composite representation of the feelings, preoccupations, though, and consideration given to a particular issue or task is designated a "Stage of Concern." The generic term given to the issue, object, problem, or challenge, the thing that is the focus of the concerns is innovation.

A questionnaire developed by the directors of the study gathered the usual demographic data such as position, gender, age, grade level taught or administered and subject area taught, when appropriate. Eight questions to measure how informed the individual was about the innovation and eight questions regarding their degree of participation in the innovation were also included in the questionnaire.

Sample

The population of responses are of teachers and principals of a large, urban mid-western school district. A stratified random sample of teachers was taken with stratification being by schools. There were 49 elementary, 9 junior high, and 10 high schools. The total population of teachers was 526. The total of 64 principals (several principals administer more than one elementary school) was included in the sample for Phase I of the study. For the Phase II study 392 teachers and 49 principals were still employed within the school district. In Phase III questionnaires were also given to all teachers and principals selected during Phase I who were employed in the district and all secondary English and Mathematics teachers. Those teachers were added to the study in this third and final phase to determine

whether there were significant differences in stages of concern of teachers most directly affected by benchwork testing (English and Mathematics) when compared with teachers in other subject areas. The total number of participants in the study during Phase III was 617 teachers and 49 principals.

Analysis

The analysis included analysis of variance, correlated t-tests, and descriptive statistics.

Summary of Findings

During Phase I of the study there was a response rate of 46 percent for classroom teachers and for building principals, 81 %. The response rate in Phase II was 68 % of the teachers and 77 % of the principals. During Phase III 51% of the teachers and 80% of the principals responded. The response of the new group of English and mathematics teachers was 68% for both groups.

A number of conclusions can be drawn from the study results:

1. At the beginning of this investigation individual teachers and principals registered varying intensities of concern about benchmark testing even though each initially had no prior experience with this innovation.

2. The results also confirmed "concerns" theory. An individual does not have only one intense Stage of Concern at a time, but rather a concerns "profile." Some Stages of Concern are relatively more intense, whereas others are present but at lower intensities.

3. The differences in teachers' Stage of Concern in relation to the grade level they teach persisted throughout the study. Elementary teachers

tended to have more intense concerns at the upper Stages than did secondary teachers.

4. Teachers in general held more intense concerns at all Stages of Concern than did principals, with the exception of Stage 5 (Collaboration). An unusual finding was that teachers consistently had more intense concerns at Stage 3 (Management) than did principals.

5. Age of teachers and principals was not found to relate to their Stage of Concern.

6. The gender of teachers, but not principals, was found to relate to Stage of Concern, how informed they were about and the extent of their participation in benchmark testing. Female teachers had more intense scores at the upper Stages, were better informed about, and more involved with benchmark testing than were male teachers.

7. The subject areas taught by secondary teachers were found to relate to their Stage of Concern. English and mathematics teachers had more intense concerns at the upper Stages and teachers of other subjects had more intense concerns at the lower Stages.

8. The greater variety of ways teachers were informed about benchmark testing, and perhaps the better informed teachers were about the innovation, the more likely they were to move toward more intense upper level Stages of Concern.

9. Although teachers moved toward concern about the impact of benchmark testing on students, they did not move strongly away from personal concerns about implementing this innovation.

10. There was a gradual, but steady increase in intensity of teacher concern regarding Refocusing (Stage 6) benchmark testing over the several years of this study.

11. Secondary teachers, other than those who instruct in English and

mathematics, expressed a consistent lack of concern about benchmark testing.

12. Involvement in implementing an innovation is a critical factor in the progression of individuals from concern for self, to concern about task, and finally, to concern about impact .

Discussion

The study results indicate that grade level taught or administered, as well as whether one's role was that of a teacher or principal were factors in the Stage of Concern exhibited. Secondary teachers had more intense concerns at Stages 0 and 1 than did elementary teachers apparently due to less involvement with and concern about the administration and results of benchmark testing. The strong Stage 0 and Stage 2 scores of teachers throughout all phases of the study, when compared with principals, reflect either a lack of involvement (Stage 0) or a concern when involved (Stage 2) with benchmark testing. The intense Stage 5 concerns of principals seem to reflect an awareness of the need for cooperation and coordination among their teaching staff regarding benchmark testing.

Teachers and principals with the least knowledge and experience with benchmark testing had most intense concerns at the lower stages and those with the most knowledge and experience were at the upper end of the scale. It is apparent that if we want teachers to get past their personal concerns about an innovation such as benchmark testing and move toward concerns about how they are going to use the innovation and whom it benefits, we must provide them with detailed information about the innovation at the very beginning of the implementation effort.

It is also apparent that the amount of information teachers possessed

about the innovation did not directly affect Stage 6 concerns. It appears that the perceived quality of an innovation itself may be generally more important to teachers and principals in concerns about changing it or selecting alternate strategies than the knowledge of what one should do to correctly implement it.

It will be important for this district to attempt to determine why there was a slow but steady increase in intensity of teacher concern regarding Refocusing (Stage 6) of benchmark testing. Do teachers believe that this testing program is a step in the right direction and should be improved or are they of the opinion that the program should undergo major change or be eliminated?

The unusually passive nature of the benchmark testing staff development program in this district may help to explain the disturbing finding of slow movement of teachers away from lower stage concerns. The fact that teachers were prepared for benchmark testing primarily by receiving printed materials and attending faculty meetings appears inconsistent with what is known about effective staff development programs.

Other factors that appear to have confounded the lack of staff movement away from Stage 2 (Personal) concerns after almost three years of working with this innovation include the "top-down" nature of the decision to introduce benchmark testing and the fact that there was very little direct involvement of principals in implementing the program. The slow movement away from lower level Stages of Concern also confirms a need for extended time to effectively implement an educational innovation.

An awareness that secondary school teachers, other than those who instruct in English and mathematics, expressed a consistent lack of concern about benchmark testing must not be quickly dismissed by the district as a reasonable expectation of those less directly involved in the program.

Unconcerned staff members may be detrimental to the district's efforts to implement this innovation.

In conclusion, the findings of this study strengthens theory relating to the implementation of educational innovations. Staff members who were involved in implementing benchmark testing over the four years of this study did indeed progress through stages of concern about this innovation. This progression was especially more pronounced for those staff members who were actively involved over a period of time, who were committed to and who had greater knowledge about benchmark testing. The results of this study also suggest that selected factors are detrimental to the movement of faculty away from concern for self and toward impact concerns. These factors include "top-down" decisions, a lack of staff development activites that extend beyond an awareness level of the purpose and nature of the innovation, and minimal involvement of building principals in helping teachers to implement the testing program.

REFERENCES

Berman, P., & McLaughlin, M (1978). Federal Programs supporting educational change, Volume VIII: Implementing and sustaining innovations. Santa Monica, CA: Rand Corporation.

Berman, P., Pauly, E. (1975). Federal programs supporting educational change, Volume II: Factors affecting change agent projects. Santa Monica, CA: Rand Corporation.

Dupuis, M., & Askov, E. (1982). An effective inservice model for content area reading in secondary schools. Educational Leadership, 40 (1), 48-50.

Elliott, J. (1975). Objectivity, ideology, and teacher participation in educational research. University of East Anglia. Norwich, England: Center for Applied Research in Education.

Fuller, F. (1969, March). Concerns of teachers: A development conceptualization. American Educational Research Journal, 6 (2), 207-226.

Fuller, F. (1970). Personlized education for teachers: An introduction for teacher educators. Austin: The University of Texas, Research and Development Center for Teacher Education.

Hall, G. (1979a). The concerns-based approach to facilitating change. Educational Horizons, 57 (40,202-208.

Hall, G. (1979b). Using the individual and the innovation as the frame of reference for research on change. Paper presented at the annual meeting of the Australia Association for Research in Education, Melbourne, Australia.

Hall, G., George, A. & Rutherford, W. (1976). Concerns of teachers about implementing team teaching. Educational Leadership, 34 (3), 227-233.

Hall, G., George, A., & Rutherford, W. (1979). Measuring stages of concern about the innovation: A manual for use of the SoC questionnaire (2nd Ed). Austin: The University of Texas, Research and Development for Teacher Education.

Heckman, P., Oakes, J., & Serotnik, K. (1983). Expanding the concepts of school renewal and change. Educational Leadership, 40 (7), 26-32.

James, R. (1981). Understanding why curriculum innovations succeed or fail. School Science and Mathematics, 80 (60), 487-494.

Loucks, S., & Pratt, H. (1979). A concerns-based approach to curriculum change. Educational Leadership, 37, 212-215.

MacDonald, B., & Walder, R. (1976). Changing the curriculum. London: Open Books.

McKay, A. B., & Nelson, M. (1980). Inservice training for curriculum change. School Science and Mathematics, 80 (8), 684-690.

McLaughlin, M., & Marsh, D. (1978). Staff development and school change. Teachers College Record, 80 (1), 69-94.

Nicholson, E., & Tracy, S. (1982). Principal's influence on teacher's attitude and implementation of curricular change. Journal of Curriculum Studies, 12 (1), 1-11.

Schiffer, J. (1978). A framework for staff development. Teachers College Record, 80 (1), 4-22.